

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Maquoketa Municipal Electric Utility

Facility Location: 505 N Old Highway 61 (North Plant) and
105 Generac Dr. (South Plant)
Maquoketa, Iowa 52060

Air Quality Operating Permit Number: 04-TV-009R1

Expiration Date: August 30, 2015

Permit Renewal Application Deadline: February 28, 2015

EIQ Number: 92-3383

Facility File Number: 49-01-013

Responsible Official

Name: Doug Owen

Title: Utility Manager

Mailing Address: 201 East Pleasant, Maquoketa, Iowa 52060

Phone #: (563) 652-6891

Permit Contact Person for the Facility

Name: Boyd Schoenthaler

Title: Power Plant Superintendent

Mailing Address: 201 East Pleasant, Maquoketa, Iowa 52060

Phone #: (563) 652-2341

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

Table of Contents

| | |
|---|-----------|
| I. Facility Description and Equipment List | 4 |
| II. Plant - Wide Conditions..... | 6 |
| III. Emission Point Specific Conditions | 9 |
| IV. General Conditions..... | 19 |
| G1. Duty to Comply | |
| G2. Permit Expiration | |
| G3. Certification Requirement for Title V Related Documents | |
| G4. Annual Compliance Certification | |
| G5. Semi-Annual Monitoring Report | |
| G6. Annual Fee | |
| G7. Inspection of Premises, Records, Equipment, Methods and Discharges | |
| G8. Duty to Provide Information | |
| G9. General Maintenance and Repair Duties | |
| G10. Recordkeeping Requirements for Compliance Monitoring | |
| G11. Evidence used in establishing that a violation has or is occurring. | |
| G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification | |
| G13. Hazardous Release | |
| G14. Excess Emissions and Excess Emissions Reporting Requirements | |
| G15. Permit Deviation Reporting Requirements | |
| G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations | |
| G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification | |
| G18. Duty to Modify a Title V Permit | |
| G19. Duty to Obtain Construction Permits | |
| G20. Asbestos | |
| G21. Open Burning | |
| G22. Acid Rain (Title IV) Emissions Allowances | |
| G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements | |
| G24. Permit Reopenings | |
| G25. Permit Shield | |
| G26. Severability | |
| G27. Property Rights | |
| G28. Transferability | |
| G29. Disclaimer | |
| G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification | |
| G31. Prevention of Air Pollution Emergency Episodes | |
| G32. Contacts List | |

Abbreviations

| | |
|-----------------|---|
| acfm..... | actual cubic feet per minute |
| CFR..... | Code of Federal Regulation |
| °F | degrees Fahrenheit |
| EIQ..... | emissions inventory questionnaire |
| gr./dscf | grains per dry standard cubic foot |
| IAC..... | Iowa Administrative Code |
| IDNR..... | Iowa Department of Natural Resources |
| kW..... | kilowatt |
| MVAC..... | motor vehicle air conditioner |
| NSPS | new source performance standard |
| ppmv | parts per million by volume |
| lb./hr..... | pounds per hour |
| lb./MMBtu | pounds per million British thermal units |
| scfm..... | standard cubic feet per minute |
| SIC | Standard Industrial Classification |
| TPY..... | Tons per year |
| USEPA..... | United States Environmental Protection Agency |

Pollutants

| | |
|------------------------|--|
| CO..... | carbon monoxide |
| HAP..... | hazardous air pollutant |
| NO _x | nitrogen oxides |
| PM..... | particulate matter |
| PM ₁₀ | particulate matter ten microns or less in diameter |
| SO ₂ | sulfur dioxide |
| VOC..... | volatile organic compound |

I. Facility Description and Equipment List

Facility Name: Maquoketa Municipal Electric Utility

Permit Number: 04-TV-009R1

Facility Description: Electric services (SIC 4911)

Equipment List

| Emission Point Number | Associated Emission Unit Number(s) | Associated Emission Unit Description | IDNR Construction Permit Number |
|-----------------------|------------------------------------|--|---------------------------------|
| Location: | | North Plant | |
| EP-1A | EU-1A | Fairbanks-Morse Generator (3165 kW) | 02-A-698-S2 |
| EP-2A | EU-2A | Fairbanks-Morse Generator (3165 kW) | 02-A-698-S2 |
| EP-3 | EU-3 | Fairbanks-Morse Generator (2070 kW) | 96-A-029-S9 |
| EP-4A | EU-4A | Caterpillar Generator (1860 kW) | 98-A-939-S7 |
| EP-5 | EU-5 | Nordberg Generator (1990 kW) | 96-A-031-S9 |
| EP-6 | EU-6 | Fairbanks-Morse Generator (2500 kW) | 96-A-032-S9 |
| EP-7 | EU-7 | Colt-Pielstick Generator (6500 kW) | 96-A-033-S9 |
| EP-8 | EU-8 | Caterpillar Generator (1825 kW) | 96-A-034-S9 |
| EP-9 | EU-9 | Caterpillar Generator (1825 kW) | 00-A-553-S5 |
| EP-B1A | EU-B1A | Fuel Oil Storage Tank (25,000 gallons) | Pending |
| EP-B2A | EU-B2A | Fuel Oil Storage Tank (25,000 gallons) | Pending |
| EP-B3A | EU-B3A | Fuel Oil Storage Tank (25,000 gallons) | Pending |
| Location: | | South Plant | |
| EP-11 | EU-11 | Generac Generator (2000 kW) | 01-A-489-S4 |
| EP-12 | EU-12 | Generac Generator (2000 kW) | 01-A-490-S4 |
| EP-13 | EU-13 | Generac Generator (2000 kW) | 01-A-1238-S3 |
| EP-14 | EU-14 | Generac Generator (2000 kW) | 01-A-1239-S3 |
| EP-B10 | EU-B10 | 12,000 Gallon Diesel Tank | 01-A-1237-S1 |
| EP-B11 | EU-B11 | 3,800 Gallon Diesel Tank | 01-A-491-S2 |
| EP-B12 | EU-B12 | 3,800 Gallon Diesel Tank | 01-A-492-S2 |
| EP-B13 | EU-B13 | 3,800 Gallon Diesel Tank | 01-A-1235-S1 |
| EP-B14 | EU-B14 | 3,800 Gallon Diesel Tank | 01-A-1236-S1 |

Insignificant Equipment List

| Insignificant Emission Unit Number | Insignificant Emission Unit Description |
|------------------------------------|---|
| EU-D7 | Fuel Oil Day Tank (551 Gallons) |
| EU-LHA | Lube Oil Tank (500 Gallons) |
| EU-L7A | Lube Oil Tank for EU-7 (2394 Gallons) |

II. Plant-Wide Conditions

Facility Name: Maquoketa Municipal Electric Utility
Permit Number: 04-TV-009 [R1](#)

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: five (5) years
Commencing on: [August 31, 2010](#)
Ending on: [August 30, 2015](#)

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Plant-Wide Emission Limits

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 245 ton/yr*
Authority for Requirement: Iowa DNR Construction Permits 96-A-029-S9, 96-A-031-S9, 96-A-032-S9, 96-A-033-S9, 96-A-034-S9, 98-A-939-S7, 00-A-553-S5, 01-A-489-S4, 01-A-490-S4, 01-A-1238-S3, 01-A-1239-S3, 02-A-698-S2, and 02-A-699-S2

* Maquoketa Municipal Electric Utility (North and South Plant) is limited to 245 tons of NO_x facility wide per rolling 12-month period. See emission point specific conditions for record keeping requirements.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

40 CFR 63 Subpart ZZZZ Requirements:

Diesel engines at the facility are subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) MACT - 40 CFR 63 Subpart ZZZZ, which was promulgated on March 3, 2010.

Affected Source

According to §63.6590, affected units are existing non-emergency, stationary, compression ignition (CI) RICE located at the facility.

Compliance Dates:

According to 40 CFR 63.6595, for existing non-emergency stationary CI RICE located at an area source for HAPs, the compliance date is May 3, 2013.

Initial Notification (40 CFR Part 63 General Conditions §63.7)

You must submit the initial notification required by §63.9(b) for an affected source no later than August 31, 2010.

Emission Limit

The diesel engines powering the generators at the facility are non-emergency stationary CI engines of greater than 500 HP. The facility is an area source for HAPs. According to §63.6603, Table 2d, Maquoketa Municipal Electric Utility shall limit the concentration of CO in the stationary RICE exhaust to 23 ppmvd CO at 15% O₂, or reduce CO emissions by 70% or more. Also see Table 2d for engine startup requirements.

Fuel Requirements

Owners and operators of existing stationary non-emergency CI engines greater than 300 HP with a displacement of less than 30 liters per cylinder located at area sources that use diesel fuel must use only diesel fuel meeting the requirements of 40 CFR 80.510(b). This section requires that diesel fuel have a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

Initial Performance Testing

According to §63.6612(a) you must conduct compliance performance testing according to 6620(b) Table 4 within 180 days after the compliance date of May 3, 2013.

Management Practices

Refer to §63.6625 for monitoring, collection, operation and maintenance requirements.

Reports and Record Keeping

Refer to §63.6650, §6655 and §6660 for reports and record keeping requirements.

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Maquoketa Municipal Electric Utility is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Maquoketa Municipal Electric Utility shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Maquoketa Municipal Electric Utility

Permit Number: 04-TV-009R1

Emission Point ID Number: EP-1A, EP-2A, EP-3, EP-5, EP-6, and EP-7

Associated Equipment

Associated Emission Unit ID Numbers: EU-1A, EU-2A, EU-3, EU-5, EU-6, and EU-7

Table 1

| Emission Point Number | Emission Unit Number | Emission Unit Description | Raw Material | Rated Capacity (Kilowatt) |
|-----------------------|----------------------|---------------------------|----------------------------------|---------------------------|
| EP-1A | EU-1A | Fairbanks-Morse Generator | Biodiesel / Diesel / Natural Gas | 3165 |
| EP-2A | EU-2A | Fairbanks-Morse Generator | | 3165 |
| EP-3 | EU-3 | Fairbanks-Morse Generator | | 2070 |
| EP-5 | EU-5 | Nordberg Generator | | 1990 |
| EP-6 | EU-6 | Fairbanks-Morse Generator | | 2500 |
| EP-7 | EU-7 | Colt-Pielstick Generator | | 6500 |

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point identified in Table 2 shall not exceed the following specified levels.

Table 2

| Emission Point Number | Opacity 567 IAC 23.3(2)"d" | PM ₁₀ (lb/hr) ⁽²⁾ | PM (lb/hr) ⁽²⁾ | Sulfur Dioxide (SO ₂) (diesel/biodiesel) | | Sulfur Dioxide (SO ₂) (Dual Fuel) | |
|-----------------------|----------------------------------|--|------------------------------|---|-------------------------------------|--|---------------------------------|
| | | | | (lb/hr) ⁽²⁾ | (lb/MMBtu) 567 IAC 23.3(3)"b" | (lb/hr) ⁽²⁾ | (ppmv) 567 IAC 23.3(3)"e" |
| EP-1A | 40 % ⁽¹⁾ | 9.11 | 9.11 | 1.94 | 2.5 | 1.94 | 500 |
| EP-2A | 40 % ⁽¹⁾ | 9.11 | 9.11 | 1.94 | 2.5 | 1.94 | 500 |
| EP-3 | 40% ^(1.1) | 2.79 | 2.79 | 1.41 | 2.5 | 1.41 | 500 |
| EP-5 | 40% ^(1.1) | 2.29 | 2.29 | 1.15 | 2.5 | 1.15 | 500 |
| EP-6 | 40% ^(1.1) | 4.66 | 4.66 | 1.70 | 2.5 | 1.70 | 500 |
| EP-7 | 40% ^(1.1) | 6.12 | 6.12 | 4.43 | 2.5 | 4.43 | 500 |

Authority for Requirement: Iowa Administrative Code (IAC) rule cited in Table 2
Iowa DNR Construction Permits specified in Table 3

- (1) An exceedance of the indicator opacity of (20%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- (1.1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
- (2) Standard is expressed as the average of 3 runs.

Table 3

| Emission Point Number | Nitrogen Oxides (NO _x) | | Iowa DNR Construction Permit No. |
|-----------------------|------------------------------------|--------------------------|-------------------------------------|
| | (lb/hr) ⁽¹⁾ | (Tons/yr) ⁽²⁾ | |
| EP-1A | 72.9 | 245 ⁽³⁾ | 02-A-698-S2 |
| EP-2A | 72.9 | | 02-A-699-S2 |
| EP-3 | 89.2 | | 96-A-029-S9 |
| EP-5 | 73.3 | | 96-A-031-S9 |
| EP-6 | 96.0 | | 96-A-032-S9 |
| EP-7 | 161.4 | | 96-A-033-S9 |

- (1) Standard is expressed as the average of 3 runs.
- (2) Standard is a 12-month rolling total.
- (3) This limit is a facility-wide limit that includes all combustion sources at the facility.

Authority for Requirement: Iowa DNR Construction Permit specified in Table 3

Operational Limits & Requirements

The owner/operator of these equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- (1) Maquoketa Municipal Electric Utility (North and South Plant) is limited to 245 tons of NO_x facility wide per rolling 12-month period.
- (2) The diesel/biodiesel fuel used in each unit shall have a sulfur content of less than or equal to 0.05 percent by weight.
- (3) Each unit shall be limited to firing on natural gas, diesel fuel or a blend of no more than 5% biodiesel.
- (4) The operation of each unit shall be limited to 1900 hours per twelve (12) month period, rolled monthly.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- (1) A record of each type of fuel and the quantity of fuel used in each unit over the previous month shall be recorded at the end of the month.
- (2) The monthly NO_x emissions shall be determined at the end of each month using the following formula:

$$\text{Facility Wide NO}_x \text{ Emissions} = \{Q_{ngg} * Ef_{ngg} + Q_d * Ef_d + Q_{ngb} * Ef_{ngb}\} * F$$

Where: Q_{ngg} is natural gas usage in generators (MMscf/month) for both plants
 Q_d is fuel oil/biodiesel usage (Mgal/month) for both plants
 Q_{ngb} is natural gas usage in boilers (MMscf/month) for both plants
 Ef_{ngg} is natural gas emission factor for generator (1200 lb/MMscf)
 Ef_d is fuel oil/biodiesel emission factor (514 lb/Mgal)
 Ef_{ngb} is natural gas combustion emission factor for boiler (115 lb/MMscf)
 F is conversion from lbs to tons (1ton/2000lbs =0.0005)

- (3) Calculate and record rolling 12-month totals of NO_x emissions from both plants and the combination of both plants.
- (4) Record or retain supplier's certification of sulfur content within diesel/biodiesel fuel fired in each unit.
- (5) The total number of hours each unit operated over the previous month shall be recorded. The total number of hours each unit has operated over the previous twelve (12) months shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permit specified in Table 3
40 CFR 72.7
567 IAC 22.123(1)

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Table 4

| Emission Point No. | Stack Height (feet, from the ground) | Stack Diameter (inches) | Stack Exhaust Flow Rate (scfm) | Stack Temperature (°F) | Discharge Style |
|--------------------|--------------------------------------|-------------------------|--------------------------------|------------------------|-----------------------|
| EP-1A | 50 | 32 | 16125 | 635 | Vertical unobstructed |
| EP-2A | 50 | 32 | 16125 | 635 | Vertical unobstructed |
| EP-3 | 39.2 | 28 | 9175 | 720 | Vertical unobstructed |
| EP-5 | 41 | 23 | 6875 | 500 | Vertical unobstructed |
| EP-6 | 44.5 | 28.5 | 15300 | 570 | Vertical unobstructed |
| EP-7 | 39.5 | 27.5 | 25050 | 800 | Vertical unobstructed |

Authority for Requirement: Iowa DNR Construction Permits specified in Table 3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of these equipment shall comply with the monitoring requirements listed below.

Stack Testing: Emission Point EP-7

Pollutant – NO_x

Stack Test to be Completed by (date) – [2 years from the date of permit issue]

Test Method - 40 CFR 60, Appendix A, Method 7E (when burn diesel fuel)

Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-4A, EP-8, EP-9, EP-11, EP-12, EP-13, and EP-14

Associated Equipment

Associated Emission Unit ID Numbers: EU-4A, EU-8, EU-9, EU-11, EU-12, EU-13, and EU-14

Table 1

| Emission Point Number | Emission Unit Number | Emission Unit Description | Raw Material | Rated Capacity (Kilowatt) |
|-----------------------|----------------------|---------------------------|--------------------|---------------------------|
| EP-4A | EU-4A | Caterpillar Generator | Biodiesel / Diesel | 1860 |
| EP-8 | EU-8 | Caterpillar Generator | | 1825 |
| EP-9 | EU-9 | Caterpillar Generator | | 1825 |
| EP-11 | EU-11 | Generac Generator | | 2000 |
| EP-12 | EU-12 | Generac Generator | | 2000 |
| EP-13 | EU-13 | Generac Generator | | 2000 |
| EP-14 | EU-14 | Generac Generator | | 2000 |

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point identified in Table 2 shall not exceed the following specified levels.

Table 2

| Emission Point Number | Opacity 567 IAC 23.3(2)"d" | PM ₁₀ (lb/hr) ⁽²⁾ | PM (lb/hr) ⁽²⁾ | Sulfur Dioxide (SO ₂) (diesel/biodiesel) | | Nitrogen Oxides (NO _x) | |
|-----------------------|----------------------------------|--|------------------------------|---|-------------------------------------|---------------------------------------|--------------------------|
| | | | | (lb/hr) ⁽²⁾ | (lb/MMBtu) 567 IAC 23.3(3)"b" | (lb/hr) ⁽²⁾ | (Tons/yr) ⁽³⁾ |
| EP-4A | 40% ⁽¹⁾ | 1.42 | 1.42 | 1.06 | 2.5 | 60.0 | 245 ⁽⁴⁾ |
| EP-8 | 40% ⁽¹⁾ | 1.60 | 1.60 | 1.06 | 2.5 | 108.1 | |
| EP-9 | 40% ⁽¹⁾ | 1.43 | 1.43 | 1.10 | 2.5 | 49.0 | |
| EP-11 | 40% ⁽¹⁾ | 3.76 | 3.76 | 1.25 | 2.5 | 33.6 | |
| EP-12 | 40% ⁽¹⁾ | 3.76 | 3.76 | 1.25 | 2.5 | 33.6 | |
| EP-13 | 40% ⁽¹⁾ | 3.76 | 3.76 | 1.25 | 2.5 | 33.6 | |
| EP-14 | 40% ⁽¹⁾ | 3.76 | 3.76 | 1.25 | 2.5 | 33.6 | |

Authority for Requirement: Iowa Administrative Code (IAC) rule cited in Table 2

Iowa DNR Construction Permits specified in Table 3

- (1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If

exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

- (2) Standard is expressed as the average of 3 runs.
- (3) Standard is a 12-month rolling total.
- (4) This limit is a facility-wide limit that includes all combustion sources at the facility.

Operational Limits & Requirements

The owner/operator of these equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- (1) Maquoketa Municipal Electric Utility (North and South Plant) is limited to 245 tons of NO_x facility wide per rolling 12-month period.
- (2) The diesel/biodiesel fuel used in each unit shall have a sulfur content of less than or equal to 0.05 percent by weight.
- (3) Each unit shall be limited to firing on diesel fuel or a blend of no more than 5% biodiesel.
- (4) The operation of each unit shall be limited to 1900 hours per twelve (12) month period, rolled monthly.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- 1) A record of each type of fuel and the quantity of fuel used in each unit over the previous month shall be recorded at the end of the month.
- 2) The monthly NO_x emissions shall be determined at the end of each month using the following formula:

$$\text{Facility Wide NO}_x \text{ Emissions} = \{Q_{ngg} * Ef_{ngg} + Q_d * Ef_d + Q_{ngb} * Ef_{ngb}\} * F$$

Where: Q_{ngg} is natural gas usage in generators (MMscf/month) for both plants

Q_d is fuel oil/biodiesel usage (Mgal/month) for both plants

Q_{ngb} is natural gas usage in boilers (MMscf/month) for both plants

Ef_{ngg} is natural gas emission factor for generator (1200 lb/MMscf)

Ef_d is fuel oil/biodiesel emission factor (514 lb/Mgal)

Ef_{ngb} is natural gas combustion emission factor for boiler (115 lb/MMscf)

F is conversion from lbs to tons (1ton/2000lbs =0.0005)

- 3) Calculate and record rolling 12-month totals of NO_x emissions from both plants and the combination of both plants.
- 4) Record or retain supplier's certification of sulfur content within diesel/biodiesel fuel fired in each unit.

- 5) The total number of hours each unit operated over the previous month shall be recorded. The total number of hours each unit has operated over the previous twelve (12) months shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permit specified in Table 3
40 CFR 72.7
567 IAC 22.123(1)

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Table 3

| Emission Point No. | Stack Height (feet, from the ground) | Stack Diameter (inches) | Stack Exhaust Flow Rate (scfm) | Stack Temperature (°F) | Discharge Style | Iowa DNR Construction Permit No. |
|---------------------------|---|------------------------------------|---|-----------------------------------|------------------------|---|
| EP-4A | 40 | 16 | 5460 | 1005 | Vertical unobstructed | 98-A-939-S7 |
| EP-8 | 40 | 16 | 5520 | 890 | Vertical unobstructed | 96-A-034-S9 |
| EP-9 | 40 | 16 | 5850 | 780 | Vertical unobstructed | 00-A-553-S5 |
| EP-11 | 40 | 16 | 6250 | 915 | Vertical unobstructed | 01-A-489-S4 |
| EP-12 | 40 | 16 | 6250 | 915 | Vertical unobstructed | 01-A-490-S4 |
| EP-13 | 40 | 16 | 6250 | 915 | Vertical unobstructed | 01-A-1238-S3 |
| EP-14 | 40 | 16 | 6250 | 915 | Vertical unobstructed | 01-A-1239-S3 |

Authority for Requirement: Iowa DNR Construction Permits specified in Table 3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of these equipment shall comply with the monitoring requirements listed below.

Stack Testing: Either Emission Point EP-13 or EP-14. The facility will choose which unit.

Pollutant – NO_x

Stack Test to be Completed by (date) – [2 years from the date of permit issue]

Test Method - 40 CFR 60, Appendix A, Method 7E (when burning biodiesel fuel)

Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-B1, EP-B2, EP-B3, EP-B10, EP-B11, EP-B12, EP-B13, and EP-B14

Associated Equipment

Associated Emission Unit ID Numbers: EU-B1, EU-B2, EU-B3, EU-B10, EU-B11, EU-B12, EU-B13, and EU-B14

Table 1

| Emission Point Number | Emission Unit Number | Emission Unit Description | Raw Material | Rated Capacity (Gallon) |
|------------------------------|-----------------------------|----------------------------------|---------------------|--------------------------------|
| EP-B1A | EU-B1A | Fuel Oil Storage Tank | Diesel | 25,000 |
| EP-B2A | EU-B2A | Fuel Oil Storage Tank | Diesel | 25,000 |
| EP-B3A | EU-B3A | Fuel Oil Storage Tank | Diesel | 25,000 |
| EP-B10 | EU-B10 | Diesel Fuel Tank | Diesel | 12,000 |
| EP-B11 | EU-B11 | Diesel Fuel Tank | Diesel | 3,800 |
| EP-B12 | EU-B12 | Diesel Fuel Tank | Diesel | 3,800 |
| EP-B13 | EU-B13 | Diesel Fuel Tank | Diesel | 3,800 |
| EP-B14 | EU-B14 | Diesel Fuel Tank | Diesel | 3,800 |

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

There are no applicable emission limits at this time.

Operational Limits & Requirements

The owner/operator of these equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

1. For B10 through B14, record annually, the net material throughput, gallons per year.
2. For B1A, B2A and B3A, records showing the dimensions of the storage vessel and the capacity.

Authority for Requirement: Iowa DNR Construction Permits specified in Table 2

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Exception

- 1. For emission points EP-B1A, EP-B2A, and EP-B3A to come into compliance, construction permits are required for the emission units vented through these points.*

Condition

As stated in the Notice of Violation dated June 23, 2010, issued to the facility by the Department concerning the units lacking current construction permits, the permittee has applied for construction permits from the Iowa Department of Natural Resources by the established date of July 23, 2010. These points will be in compliance at the time the pending construction permits for the units venting through these points are issued.

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Table 2

| Emission Point No. | Stack Height* (feet, from the ground) | Stack Diameter (inches) | Stack Exhaust Flow Rate (scfm) | Stack Temperature (°F) | Discharge Style | Iowa DNR Construction Permit No. |
|---------------------------|--|------------------------------------|---|-----------------------------------|------------------------|---|
| EP-B1A | 7 | 2 | Draft | 48 | Downward | Pending |
| EP-B2A | 7 | 2 | Draft | 48 | Downward | Pending |
| EP-B3A | 7 | 2 | Draft | 48 | Downward | Pending |
| EP-B10 | 18 | 2 | 20 | 50 | Downward | 01-A-1237-S1 |
| EP-B11 | 3.4 | 2 | 20 | 50 | Downward | 01-A-491-S2 |
| EP-B12 | 3.4 | 2 | 20 | 50 | Downward | 01-A-492-S2 |
| EP-B13 | 3.4 | 2 | 20 | 50 | Downward | 01-A-1235-S1 |
| EP-B14 | 3.4 | 2 | 20 | 50 | Downward | 01-A-1236-S1 |

Authority for Requirement: Iowa DNR Construction Permits specified in Table 2

*The stack heights listed above are the minimum heights required by the construction permits specified in Table 2.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of these equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-EB, EP-WB

Associated Equipment

Associated Emission Unit ID Numbers: EU-EB, and EU-WB

Table 1

| Emission Point Number | Emission Unit Number | Emission Unit Description | Raw Material | Rated Capacity (MMBtu/hr) |
|-----------------------|----------------------|---------------------------|--------------|---------------------------|
| EP-EB | EU-EB | Natural Gas Boiler | Natural Gas | 1.675 |
| EP-WB | EU-WB | Natural Gas Boiler | | 1.675 |

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Particulate Matter

Emission Limit(s): 0.8 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of these equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

(1) Maquoketa Municipal Electric Utility (North and South Plant) is limited to 245 tons of NO_x facility wide per rolling 12-month period.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- (1) A record of each type of fuel and the quantity of fuel used in each unit over the previous month shall be recorded at the end of the month.
- (2) The monthly NO_x emissions shall be determined at the end of each month using the following formula:

$$\text{Facility Wide NO}_x \text{ Emissions} = \{Q_{\text{ngg}} * E_{\text{fngg}} + Q_{\text{d}} * E_{\text{fd}} + Q_{\text{ngb}} * E_{\text{fngb}}\} * F$$

Where: Q_{ngg} is natural gas usage in generators (MMscf/month) for both plants
 Q_d is fuel oil/biodiesel usage (Mgal/month) for both plants
 Q_{ngb} is natural gas usage in boilers (MMscf/month) for both plants
 E_{fngg} is natural gas emission factor for generator (1200 lb/MMscf)
 E_{fd} is fuel oil/biodiesel emission factor (514 lb/Mgal)
 E_{fngb} is natural gas combustion emission factor for boiler (115 lb/MMscf)
 F is conversion from lbs to tons (1ton/2000lbs =0.0005)

- (3) Calculate and record rolling 12-month totals of NO_x emissions from both plants and the combination of both plants.

Authority for Requirement: Iowa DNR Construction Permit specified in Table 3
 40 CFR 72.7
 567 IAC 22.123(1)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, [Windsor Heights](#), Iowa 50324, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides

for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to [May 15, 2001](#).
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to [July 21, 1992](#), provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with [applicable requirements of 567 – Chapter 23 or a permit condition](#). For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring,

reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
[Windsor Heights, IA 50324](#)
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
[Windsor Heights, IA 50324](#)
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1023 W. Madison
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Health Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000